

In the Specification

Page 6 of the specification, first full paragraph, replace with:

An embodiment of the invention is here referred to as distribution manifold 10. Manifold 10 includes an input adapted to be connected to a pressurized source of anhydrous ammonia (see Figure 1B), and has a plurality of fittings 80 radially distributed around the manifold body 12 (see Figure 1A) that can be operatively connected to hoses 71 which, in turn, are connected at distal ends to individual injection knives for an anhydrous ammonia injection system (see Figure 1B where, for simplicity, just one fitting 80 from an outlet 22 is diagrammatically illustrated connected by a hose 71 to an injection knife).

Page 7, 3rd paragraph, replace with:

An impeller 30 is insertable into conical cavity 26 of manifold body 12. In this example it is made of solid glass-impregnated Teflon ® (25% impregnated with glass beads). Such material is relatively easy to machine and has relatively low change in volume over a substantial temperature range. It is approximately 4 inches diameter at its base 38. It serves as an impeller that is relatively freely rotatable once installed in position in response to pressure of fluid (liquid or gas phase) through conduit 24. Spiral grooves or flighting 34 on the exterior of impeller 30 (a conical member which closely matingly conforms to cavity 26--the slope of the exterior of impeller 30 and the slope of conical cavity 26 are the same), provides a fluid pathway from bore 24 to a distribution groove 36 in impeller 30. In this embodiment there are three spiral grooves (each approximately 1.25 rotations and 120° apart on the exterior of the impeller) (See, e.g., Figure 3D). Thus the NH₃ has three spiral groove paths to enter and traverse between the tip 32 of impeller 30 and its base (at distribution groove 36). Distribution groove 36 is positioned in the plane of radial outlets 22 of manifold body 12 and is in concurrent fluid communication with all outlets 22.

Page 8, 2nd full paragraph, replace with:

Impeller 30 is held in rotatable fashion as follows. A bearing apparatus (generally referred to at reference numeral 40 and shown more specifically at Figures 4A-H and Figure 5), includes a threaded end 44 which extends through center opening 64 in end plate 60 and can be

secured there by nut 68. An opposite end 42 includes opposite flattened portions 55, and a concave end face 53.

Page 10, 4th paragraph, replace with:

A tachometer 83, connected by wire 84 to a read-out or other device, can be positioned in opening 78 on end plate 60 and used to monitor the speed of the impeller 22 (see Figure 5).